THE INTERNATIONAL OCEAN CARBON COORDINATION PROJECT (IOCCP)

A joint project of SCOR and IOC and an affiliate program of the Global Carbon Project.

Project Coordinator: Maria Hood, Intergovernmental Oceanographic Commission - UNESCO

NEWSLETTER No. 7, February 2005

CARBO-OCEAN Holds Kick-Off Meeting in Bergen

Approximately 100 scientists from 35 institutes gathered last week in Bergen, Norway, to Kick-Off the EU Framework 6 Integrated Project, CARBO-OCEAN. CARBO-OCEAN aims at an accurate assessment of the marine carbon sources and sinks. The ambitious target is to reduce the present uncertainties in the quantification of net annual air-sea CO2 fluxes by a factor of 2 for the world ocean and by a factor of 4 for the Atlantic Ocean. The Integrated Project will deliver description, process oriented understanding and prediction of the marine carbon sources and sinks with special emphasis on the Atlantic and Southern Oceans on a time scale -200 to +200 years from now.

The workshop was organized to include plenary and parallel working sessions on the 5 core themes of CARBO-OCEAN and each theme's 12 month, 18 month, and 5 year deliverables. The core themes and theme leaders are:

North Atlantic and Southern Ocean CO2 air-sea exchange on a seasonal-to-interannual scale (Andrew Watson)

Detection of decadal-to-centennial ocean carbon inventory changes (Douglas Wallace)

Carbon uptake and release at European regional scale (Helmuth Thomas)

Biogeochemical feedbacks on the oceanic carbon sink (Marion Gehlen)

Future scenarios for marine carbon sources and sinks (Christophe Heinze)

The workshop also gave the partners the opportunity to meet the Bergen-based administration team and to kick off the management issues of budgets, reporting, and time sheets. As part of the administration team, CARBO-OCEAN will have a technical officer and web-manager who will work closely with the data management team, and will soon develop a new CARBO-OCEAN web site.

Issues of integrating the work of CARBO-OCEAN into the worldwide carbon cycle research community including the terrestrial CarboEurope IP was ensured through an international advisory panel consisting of leading carbon cycle researchers and several US Partners actively participating in

the program. CARBO-OCEAN will also contribute to the global research frameworks outlined by SOLAS and IMBER.

Further Reading: Carbo-Oceans Home Page at Pangaea:
http://www.pangaea.de/Projects/CARBOOCEAN/

Changing "Ocean-Colour" ?: A Survey
Submitted by the IOCCG Secretariat

What's in a name?

For some time, the International Ocean-Colour Coordinating Group (IOCCG) has been debating the advantages and disadvantages of the term "ocean colour" as a descriptor for our area of science. It differs from the terms applied in other areas of ocean remote sensing (such as SST, SSH) in that it is rather vague and is not immediately recognisable as a quantitative entity. Some people on the outside perceive it as nothing but pretty pictures from which no quantitative information can be extracted. For example, "ocean colour" as stated has no obvious scientific units. When remote sensing missions contributing to climate studies are listed, ocean colour stands out from the rest in this respect. In the worst case, the result is that ocean-colour work might be taken less seriously than the rest by the earth-observation community, clearly an undesirable outcome.

Against this background, the IOCCG proposes tentatively that from now on what we have been calling "ocean colour" be called Sea Spectral Reflectance (SSR). It would subsume all the principal derived products we are accustomed to using. It has the advantage of being brief (SSR), a description of what we use (spectral reflectance) and is known to be dimensionless. SSR is clearly quantifiable.

The purpose of this communication is to solicit comments from the SSR community. If the comments are generally favourable, the committee will work aggressively to establish this new terminology at the international level. The IOCCG considers that this would represent a beneficial change for our community.

Please send your comments to: IOCCG@mar.dfo-mpo.gc.ca, with the subject line "Ocean-Colour Name?"

Thank you

Further Reading: Presentations from 10th IOCCG Meeting, 19 January 2005:
http://www.ioccg.org/Meeting10_presentations.html

New MATLAB routine to calculate CO2 System Parameters
Contributed by Richard Zeebe and Dieter Wolf-Gladrow.

Dear Colleagues,
A beta version of a new MATLAB routine to calculate CO2 chemistry parameter (csys3.m) is available at:
http://www.soest.hawaii.edu/oceanography/faculty_html/Zeebe2/CO2_System_in_Seawater/csys.html

(Note: this is a supplement to book: CO2 in Seawater: Equilibrium, Kinetics, Isotopes by Zeebe and Wolf-Gladrow, 2001)

This beta version features a user interface and allows data input/output from/into files. The ReadMe file only contains brief instructions and will not serve as documentation/manual which may be added in the future.

Please send bug reports and comments to:
zeebe@hawaii.edu
dwolf@awi-bremerhaven.de

Best regards, Richard and Dieter

Southeast Asia Regional Committee for START Call for Proposals

SARCS is currently inviting research proposals from scientists in the Southeast Asia region to work on the Southeast Asia Regional Carbon and Water Project.

START is an international, non-governmental organization co-sponsored by the Earth System Science partnership comprising the four international global change research programmes, IGBP, IHDP, WCRP and DIVERSITAS. START's principal aim is to encourage and enable regional global change science, while enhancing capabilities of individuals, institutions and developing regions to conduct global change research. The Southeast Asia Regional Committee for START (SARCS) is responsible for coordinating START-initiated global environmental change activities in Southeast Asia. Recently SARCS has initiated activities on the regional carbon and water cycles.

SARCS invites research proposals from scientists in the Southeast Asia region who seek financial support for regional research projects beginning March 2005. For this purpose, SARCS has secured funding from the National Science Council, Taiwan. All proposals must focus on global change and regional carbon and water cycles. Only research activities per se can be included in the proposals. Four to six projects will be selected for funding in February 2005 by a proposal review board. The accepted, peer-reviewed proposals will be financially supported at a modest level not to exceed US$ 30,000 per project to cover a 12-18 month period.

SARCS also plans to hold an "Advanced Training Workshop on Carbon and Water Issues in Southeast Asia" in Taiwan between 15-28 November, 2005. An international team of roughly 20 natural and social scientists/policy makers will be invited to train roughly 35 junior faculty or senior technician/staff with full support from the National Science Council of China-Taipei. Further details will be made available soon.